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May 3, 2005

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340
Attention: Brian Kelly

ITEM NO. 9

SUPPORTING DOCUMENT 10

Subject: Lake Cuyamaca Parks and Recreation District Septic System Status and Proposed Action
(Order No. R9-2004-0015)

Dear Chairman Minan and Members of the Board:

This is the third time that the Lake Cuyamaca Parks and Recreation District Septic System has come before the Board for action. We have reviewed the April 1, 2005 staff internal memorandum[1] from Brian Kelly and Michael McCann to Executive Officer John Robertus on the status of the status discharge and proposed action. The septic system has been installed but not certified to meet the requirements of the subject. The staff reports that the water samples taken from the monitoring wells do not meet the prescribed water quality requirements of the Order for nitrates, iron and manganese. Consequently, the discharge from the septic system would not be in compliance with Order as well.

Recommendation .We considered the staff options to resolve this issue and the Kennedy/Jenks April 5, 2005 report [2]. We are not confident that the site is suitable for a septic system. We recommend that the Board not authorize the discharge of wastewater into the leach field and require that the wastewater be trucked to an authorized off-site wastewater treatment plant such as the Padre Dam treatment plant. We believe that this is the most expeditious solution. It avoids the uncertainty that the discharger will comply with the water quality performance requirements of the Order over the long term. The reasons for making this recommendation are given below.

Discussion. Key issues:

- Certification report has not been submitted. It has been 6 months since the septic system has been installed.
- Insufficient data from the three monitoring wells and inconclusive analysis provided in the April 5 consultant report.
- Specific site data including any percolation tests conducted during the construction of the leach fields and assessment of the presence and extent of subsurface fractured rock has not been provided.
- No onsite inspection information on the surface drainage during the heavy winter rains.
- Park District request for authorization to begin discharge of wastewater into disposal facilities not justified

Staff has listed four options to resolve this issue. Their recommended option is to request the Park District to submit the certification report and if the report identifies area of non-compliance then the report would need to propose specific steps to comply with the requirement with schedule to complete each step. This recommendation is too vague and gives too much room for the discharger to continue protracted delays to come into compliance.

None of these options addresses the need to determine the underlying reasons for the cause of the poor water quality. Given the minimal information on the hydrology and geological description of the leach field site and the latest Park District consultant report (Kennedy/Jenks), the Park District has not demonstrated to us that that the site is suitable for the septic system. We disapproved the Park District Mitigated Negative Declaration[3] finding for the projects on several

[1] Executive Officer's Report for April 2005, Attachment B-12.
http://www.waterboards.ca.gov/sandiego/eo_report/reports/4-13-05%20eo.pdf

[2] Kennedy/Jenks Consultants, *Lake Cuyamaca Recreation and Park District Wastewater System Compliance Report*, 24 April 2005

[3] Lake Cuyamaca Recreation and Park District, *Notice of Intent to Adopt Mitigated Negative Declaration*, Lake Cuyamaca Wastewater Infiltration System, December 4, 2003

reasons. One primary reason was that the negative declaration did provide, as we recommended, measurements to establish a baseline water quality for the groundwater around the vicinity of the leach fields. Common sense would require that these tests be conducted prior to constructing the septic system. We also noted that the minimal groundwater tests were conducted during a period of extended drought.

The Kennedy/Jenks report states that the Cedar forest fire could be the cause for the high levels of nitrates and iron. However, no data are available to compare these values for comparable rainfalls and at pre-fire conditions. Nor does the report acknowledge that fires will occur in the future potentially causing similar impacts to the water quality. The report opines that the high chloride levels observed in the initial samples could be due to the chlorides leaching from the PVC (polyvinyl chloride) casing. See the attached Figure 1. However, the report fails to note the correlation with sulfates. Our analysis of the monitoring data shows a high degree of correlation between chloride and sulfate at well MW1. Was the wellhead capped per design standards to prevent surface flow contamination? See the attached Figure 1. The report apparently did not analyze this. Furthermore, if leaching is the reason, it begs the question why PVC pipe was used for water quality measurements and not HDPE (high density polyethylene) pipes that do not contain chlorides. The report did not state if percolation tests were conducted during and after the construction of the leach fields to determine the hydraulic conductivity of the subsurface. This information would have been useful in analyzing the monitoring well data.

Section 4 of the Kennedy/Jenks report indicates that the monitoring well data shows a declining trend in nitrates and iron concentration and may eventually meet the performance compliance. This reasoning assumes that future higher than normal rainfall even in the absence of forest fires would not cause non-compliance. We reject this line of reasoning. We also do not concur with the nitrate compliance alternatives.

The report requests a five-year compliance schedule for groundwater quality stabilization and possible project improvement actions. During this period the discharger requests that authorization to begin discharge into the disposal facilities. We urge that this request be denied.

In summary, the Lake Cuyamaca Recreation and Parks District has failed to provide essential information that discharging the septic system wastes into the designated leach fields will comply with the water quality performance requirements of the Order No. R9-2004-0015. Given the above discussion, it is incredulous to us that the discharger has requested for authorization to begin the discharge of wastewater into the disposal facility. We urge that Board adopt our recommendation not to authorize the discharge of wastewater into the leach field and require that the wastewater be trucked to an authorized off-site wastewater treatment plant such as the Padre Dam treatment plant.

Thank you.

Sincerely,

Ed Kimura
Water Issues
Sierra Club, San Diego Chapter

Monitoring Well 1 Chloride and Sulfates

Figure 1